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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/800,170

03/12/2004

Larry Don Williamson

9082

35979

7590

12/05/2006

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EXAMINER

BUTLER, PATRICK

ART UNIT

PAPER NUMBER

1732

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,170

Applicant(s)

WILLIAMSON, LARRY DON

Examiner

Patrick Butler

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-28 and 30-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-28 and 30-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election of Group II – method, in the reply filed on 24 July 2006 and 06 September 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. A listing of references bridges page 4 to page 5 of the specification.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

Art Unit: 1732

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it appears to exceed 150 words and uses a phrase which can be implied: In accordance with this invention. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25, 27, 28, 30, 31, 33, 35, and 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaques (US Patent No. 768,127) in view of Huffaker (US Patent No. 3,225,409).

With respect to Claims 25, 33, and 42, Jaques teaches a method of making bricks or blocks by forcing particles together (method for producing a compressed block) (see page 1 of text, lines 12-25 and 40-64) by providing a die *a* with an extension *c* (providing a compression chamber with an elongated longitudinal bore having and ending with an open outlet end) (see fig. II; page 2 of text, lines 38-51) where material *b'* drops from the outlet of the hopper *h* (introducing into the bore of the compression chamber an amount of uncompressed material; by feeding the uncompressed earth into the bore of the compression chamber from a port in a forward portion of the compression chamber; a fill port communicating with the bore; while the ram is in the

Art Unit: 1732

retracted position, feeding a batch of uncompressed material into the bore from the fill port) (see fig. XI; page 2 of text, lines 82-96), a pressure-exerting stroke of the plunger commences toward the open chamber end to the extent that bar is forced from the opening (forcing the uncompressed earth toward the outlet end; which is blocked by previously compressed lifts of material; stroking a ram into the bore of the compression chamber progressing from the forward portion of the chamber towards the open outlet end, to apply a force to the uncompressed material greater than an opposing frictional threshold force of all lifts of previously compressed material in the bore; a ram that is movable within the bore from a retracted position on one side of the fill port to an extended position between the fill port and the outlet end; while the outlet end is open, stroking the ram forward to force the uncompressed earth contained in the compression chamber against previously compressed lifts of earth in the compression chamber, and when the force exerted by the ram overcomes the frictional threshold of the combined mass of the previously compressed lifts, advancing the combined mass a pre-selected distance) (see page 2 of text, lines 82-108), stroking the plunger rearward (moving the ram in a rearward direction to a retracted position) (see page 2 of text, lines 95-108), and the process is repeated to form and fuse a plurality of lifts compressed together within the compression chamber (see page 2 of text, lines 82-108). From the perspective of the knife *e* defining the end of the compression chamber, the bar is a continuous length of compressed earth that protrudes out the open end. Knife *e* cuts the bar into sections within the die *a* onto a plate *l* (separating a portion from the continuous length to define a compressed block; shearing at least a part of the

Art Unit: 1732

continuous length protruding from the outlet end from the remaining portion of the continuous length to define a compressed block; positioning a shearing chamber and a support structure at the outlet end of the compression chamber; when a desired length of the compressed earth has moved through the shearing chamber onto the support structure, actuating the shearing chamber to sever a compressed block of desired length, which is fully supported on the support structure) (see fig. III; page 2 of text, lines 109-124; page 3 of text, lines 40-60).

Jaques does not expressly teach that the bricks or blocks or other products of cement or artificial stone of plastic material is earth.

Huffaker teaches that playa or alluvial clay (earth) is made into blocks (see col. 1, lines 8-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Huffaker's earth material with Jaques's method of making blocks because Jaques requires any material for making blocks and Huffaker's earth material is of plentiful supply, inexpensive, durable, and has excellent insulating properties (see col. 1, lines 8-39).

With respect to Claim 27, Jaques teaches that material b' drops from the outlet of the hopper h (feeding the uncompressed earth into the compression chamber from a direction transverse to the bore) (see fig. XI; page 2 of text, lines 82-96),

With respect to Claim 28, Jaques teaches using a pitman f^2 to apply pressure (applying pressure from an actuator) to the plunger f (to a ramming plate) so that the addition to the column emerges from the outer and discharging end of the die extension

Art Unit: 1732

c (in an amount greater than an opposing frictional threshold exerted by the previously compressed lifts) (see page 5 of text, lines 33-46; fig. X and XI).

With respect to Claim 30, as the bar is being compressed and extended as it passes by the knife e, the length is necessarily varying as it is being formed and continuous (see fig. III).

With respect to Claim 31, Jaques teaches making the bar multiple lengths of the desired block size (fig. III), and Huffaker teaches a block 4 in. long (see col. 2, lines 22-25), which would necessarily have a length greater than 6 in. As previously described, Jaques's process is repeated to form a plurality of lifts compressed together within the compression chamber (continuous length of compressed earth; made up of a plurality of lifts) (see page 2 of text, lines 82-108).

With respect to Claim 35, the process forms a plurality of lifts compressed together within the compression chamber, which would thus form the blocks (see page 2 of text, lines 82-108). The process would thus create compressed block made up of a plurality of the lifts.

With respect to Claim 38, the formed blocks are pushed onto a plate / (supporting surface) (see page 3 of text, lines 40-60).

With respect to Claim 39, Jaques teaches stroking the plunger rearward (moving the ram in a rearward direction) (see page 2 of text, lines 95-108) to a point rearward of the port in the compression chamber (see fig. XI).

With respect to Claim 40, the stroke of the plunger is substantially shorter than the longitudinal length of the compression chamber (see fig. III and XI), particularly from the perspective of the knife *e* defining the end of the compression chamber.

With respect to Claim 41, when the ram is forward of the outlet of the hopper *h*, the outlet (port) is closed off (see fig. X).

Claims 26, 36, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaques (US Patent No. 768,127) in view of Huffaker (US Patent No. 3,225,409) as applied to claims 25, 33, and 42 above, and further in view of Stanga (US Patent No. 3,421,220).

With respect to Claims 26, 36, and 44, Jaques teaches the method of making adobe as previously described. Jaques does not expressly teach pushing the portion of the length of compressed material out of the outlet end into and through a shearing chamber onto a support structure then moving the shearing chamber transverse to the bore of the compression chamber to shear said portion from the continuous length.

Stanga teaches solving the same problem of desiring finished product with uniform texture and a smooth skin in a molded object by extruding (incrementally moving the continuous length) into a former (shearing chamber) and rotating the molded object from the extruding column (moving the shearing chamber transverse to the longitudinal bore of the compression chamber to shear said portion from the continuous piece; moving the shearing chamber transverse to the longitudinal axis) (see Abstract; col. 1, line 65-70; col. 4, lines 4-15; col. 4, lines 35-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Stanga's shearing technique to divide the extruded material of Jaques because Stanga's shearing provides a smooth, firm, non-porous end (see col. 4, lines 54-57).

Claims 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jaques (US Patent No. 768,127) in view of Huffaker (US Patent No. 3,225,409) as applied to Claim 31 above, and as evidenced by Moses (US Patent No. 3,458,953).

Jaques teaches a continuous block of several multiples of the desired block size as previously described. Moses teaches that adobe is 117.5 lb./ft³ (see col. 2, lines 14-16). Huffaker teaches a desired length of 10 in. x 14 in. x 12 in. (see col. 2, lines 22-25). Jaques's bar is 3 times the desired block length: one freshly pressed, one before knife, and one after knife yet uncut (see Jaques, fig. 3). Thus, the continuous block's dimension would have dimensions of 10 in. x 14 in. x 12 in. and weigh greater than 100 lb. (10 in. x 14 in. x (3 x 4 in.) x 117.5 lb./ft³ x $\left[\frac{1 \text{ ft}^3}{12 \text{ in.} \times 12 \text{ in.} \times 12 \text{ in.}} \right] = 114.2 \text{ lb} \approx 100 \text{ lb.}$).

Claims 34, 37, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaques (US Patent No. 768,127) in view of Huffaker (US Patent No. 3,225,409) as applied to claim 33 and 42 above, and further in view of Underwood (US Patent No. 6,347,931).

With respect to Claims 34 and 43, Jaques teaches the method of making blocks as previously described. However, Jaques does not expressly teach forming mating indentations and protrusions on side surfaces of the continuous length of compressed earth as it is being formed and passes through the outlet end, so that upon shearing, an

Art Unit: 1732

indentation on one of the compressed blocks will mate with a protrusion of another block to form interlocking surfaces.

Underwood teaches using a bore with shapes that produces tongue and groove earth blocks (see fig. 6 and 14; col. 2, lines 29-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Underwood's shaped bore in the process of making blocks as taught by Jaques in order to produce tongue and groove blocks (see Underwood, fig. 6 and 14; col. 2, lines 29-34).

With respect to Claim 37, Jaques teaches the method of making blocks as previously described. However, Jaques does not expressly teach providing the ram with a convex protrusion, and engaging the uncompressed earth with the protrusion.

Underwood teaches using a bore with shapes that produces tongue and groove earth blocks (see fig. 6 and 14; col. 2, lines 29-34). Since the plate 30 travels through ramming chamber 16 that has the shaped bore, the plate would necessarily have a contour complimentary to the bore. As shown in fig. 6, the bore's complement would have a convex shape. Thus the plate 30 (ram), which engages the uncompressed earth, would have a convex protrusion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Underwood's shaped bore and plate in the process of making blocks as taught by Jaques in order to produce tongue and groove blocks (see Underwood, fig. 6 and 14; col. 2, lines 29-34).

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jaques (US Patent No. 768,127) in view of Huffaker (US Patent No. 3,225,409) as applied to claim 33 above, and further in view of Jeppesen (US Patent No. 3,008,199).

With respect to Claim 37, Jaques teaches the method of making blocks as previously described. However, Jaques does not expressly teach providing the ram with a convex protrusion, and engaging the uncompressed earth with the protrusion.

Jeppesen teaches using a plate 12 with a pattern 13 (convex protrusion) when making blocks (see col. 3, lines 23-30; fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Jeppesen's use of a patterned plate in the process of Jaques in order to inexpensively form blocks with casting cavities (see Jeppesen, col. 1, lines 11-22).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is (571) 272-8517. The examiner can normally be reached on Mo.-Th. 7:30 a.m. - 5 p.m. and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Assistant Examiner
Art Unit 1732



CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER

12/1/08